

Title (en)

OPEN CLOSE DETECTION OF FOLDABLE PHONE LID ANGLE CALCULATION

Title (de)

OFFEN-NAH-ERKENNUNG DER BERECHNUNG DES WINKELS EINES KLAPPBAREN TELEFONDECKELS

Title (fr)

DÉTECTION DE PROXIMITÉ D'OUVERTURE DE CALCUL D'ANGLE DE COUVERCLE DE TÉLÉPHONE PLIABLE

Publication

EP 4216043 A3 20230906 (EN)

Application

EP 23151563 A 20230113

Priority

US 202217648646 A 20220121

Abstract (en)

A method for operating an electronic device includes rotating a first portion of a flexible touchscreen with respect to a second portion of the flexible touchscreen around a folding axis; detecting, self-capacitances sensed in a folding area of the flexible touchscreen using a self-sensing scan, where a first side of the folding area is on the first portion of the flexible touchscreen and a second side of the folding area is on the second portion of the flexible touchscreen, and the first side and the second side are separated by a folding axis; determining, a current strength sensed by the flexible touchscreen in the folding area based on the self-capacitances in the folding area; and determining, a folding angle of the first portion of the flexible touchscreen with the second portion of the flexible touchscreen around the folding axis based on the current strength in the folding area.

IPC 8 full level

G06F 3/041 (2006.01); **G06F 3/044** (2006.01); **G06F 1/16** (2006.01)

CPC (source: CN EP US)

G01B 7/30 (2013.01 - CN); **G06F 1/1641** (2013.01 - EP US); **G06F 1/1643** (2013.01 - EP); **G06F 1/1652** (2013.01 - EP US); **G06F 1/1677** (2013.01 - EP); **G06F 3/0412** (2013.01 - CN); **G06F 3/04166** (2019.05 - US); **G06F 3/041662** (2019.05 - EP); **G06F 3/044** (2013.01 - CN US); **G06F 3/0446** (2019.05 - EP); **G06F 2203/04102** (2013.01 - CN EP US)

Citation (search report)

- [IA] US 2019042042 A1 20190207 - HEI YAJUN [CN], et al
- [A] US 2015346875 A1 20151203 - YEH SHANG-TAI [TW]
- [A] US 2017285837 A1 20171005 - ZENG YANG [CN], et al

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

US 11573663 B1 20230207; CN 116481417 A 20230725; EP 4216043 A2 20230726; EP 4216043 A3 20230906

DOCDB simple family (application)

US 202217648646 A 20220121; CN 202310058163 A 20230120; EP 23151563 A 20230113